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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/864,607	05/23/2001	Peter J. Brittenham	RSW920010106US1	3651

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EXAMINER

COFFY, EMMANUEL


ART UNIT	PAPER NUMBER
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2157

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 09/864,607	Applicant(s) BRITTENHAM ET AL. 	
	Examiner Emmanuel Coffy	Art Unit 2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to the application filed on 23 May, 2001. Claims 1-24 are pending. Claims 1-30 are directed to a method for a "Dynamic Undeployment of Services in a Computing Network."

Claim Objections

2. Claims 13, 14, 18 and 22 are objected to because of the following minor informalities. Claims 13, 14, 18 and 22 are dependent claims, which claim dependency on 3, 6, 1 and 5 respectively. A claim that depends from a dependent claim should not be separated by any claim that does not also depend from said dependent claim. It should be kept in mind that a dependent claim may refer to any preceding independent claim. In general applicant's sequence will not be changed. See MPEP §608.01(n). Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 5-24 are rejected under 35 U.S.C. §103(a) as being unpatentable over Khello (US 5,657,451) in view of Reifer et al. (US 6,421,727); claim 4 is rejected in view of French et al. (US 6,745,241)

Khello teaches the invention substantially as claimed including a generic service coordination mechanism which solves feasible service interaction problems taking into

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account real-time processing constraints within telecommunication networks. Data defined on the basis of a general allocation, an individual subscriber allocation, and a service allocation is manipulated during provision and withdrawal, activation and deactivation, and invocation and operation of service procedures. (See abstract).

Claim 1:

Khello substantially teaches the invention including a method of dynamically undeploying services in a computing network, comprising steps of:

receiving an undeployment trigger for a selected service;(See col. 8, lines 54-56)

determining one or more network locations where the selected service is deployed; and

effecting a dynamic undeployment by programmatically removing the selected service from one or more selected ones of the network locations. (See col. 5, lines 59-67).

Khello teaches the elements of the claim as outlined above. Khello does not explicitly teach determination of network locations. However, Reifer teaches a gateway that receives and evaluate the location of a "service gateway" in order to determine whether it is permissible for a service request to proceed. (See col. 4, lines 24-29). Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the system taught by Khello with the location determination disclosed by Reifer. This feature is essential to help ensure compliance with restrictions. Therefore, claim 1 is rejected.

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Claim 2:

Khello substantially teaches the invention including the method according to claim 1, further comprising the steps of: (See col. 13, lines 9-21)

receiving client requests for the selected service; and (See col. 6, lines 30-34).

continuing to serve the received requests from the network locations other than the one or more selected ones from which the selected service was programmatically removed. (See col. 6, lines 30-43).

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to use the system taught by Khello. Therefore, claim 2 is rejected

Claim 3

Referring to claim 3, it recites the method according to claim 1, wherein the undeployment trigger is based upon usage of the selected service at the network locations.

Khello does not explicitly teach undeployment based upon usage of selected service. However, Reifer teaches managing usage information of the network. (See col. 4, lines 46-47). Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the system taught by Khello with the network's usage information disclosed by Reifer. Usage is synonymous with load. This feature allows load balancing across a network. Therefore, claim 3 is rejected.

Claim 4:

Referring to claim 4, it recites the method according to claim 1, wherein the undeployment trigger is based upon network load at the network locations.

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Khello teaches receiving an undeployment request , Khello does not explicitly teach that said undeployment trigger be based upon network load; neither does Reifer. However, French teaches network loading configuration. Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the system taught by Khello and Reifer with the network's loading configuration disclosed by French. This feature allows load balancing across a network. Therefore, claim 4 is rejected.

Claim 5:

Khello teaches the invention substantially as claimed including the method according to claim 1, wherein the undeployment trigger is an undeployment request issued by an origin server from which the selected service was initially deployed.

Khello teaches sending an undeployment request by a coordination mechanism. (See col. 15, lines 46-50). Khello does not explicitly teach an origin server issuing the undeployment request. However, Reifer teaches an origin server requesting service activation. (See abstract). Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the system taught by Khello with the internetworking system disclosed by Reifer. There is a need to identify the server which server is requesting service removal. Therefore, claim 5 is rejected.

Claim 6:

Khello teaches the invention substantially as claimed including the method according to claim 3, further comprising comparing the usage of the selected service to

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a predetermined threshold, and sending the undeployment trigger when the usage falls below the predetermined threshold.

Khello does not explicitly teach comparing the usage of the selected service to a predetermined threshold. However, Reifer teaches usage comparison at col. 5, lines 13-16. Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the system taught by Khello with the network's usage comparison disclosed by Reifer. This feature allows load balancing across a network. Therefore, claim 6 is rejected.

Claim 7:

Referring to claim 7, it recites the method according to claim 6, wherein a value of the predetermined threshold may be modified over time. It is implicit that a threshold value in a network system may be modified over time based on the usage reports. (See Reifer, col. 6, lines 55-60. Therefore, claim 7 is rejected.

Claim 8:

Khello teaches the invention substantially as claimed including the method according to claim 6, wherein a value of the predetermined threshold applies to a plurality of deployed services. (See col. 5, lines 52-54). Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to use the consistent service provisioning taught by Khello. Therefore, claim 8 is rejected.

Claim 13:

Khello teaches the invention substantially as claimed including the method according to claim 3, wherein the usage is an average number of client requests for the

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selected service within a predetermined time interval. (See col. 6, lines 1-3). Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to use the statistics maintenance taught by Khello. Therefore, claim 13 is rejected.

Claims 9-12 and 14-24

These claims do not teach or define any significantly new limitations above and beyond claims 1-8 and 13 to warrant particular treatment, and therefore, are rejected for similar reasons.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Helland et al. (U.S. 6,631,425) teaches "Just-In-Time Activation And As-Soon-As-Possible Deactivation Or Server Application Components."
- Aahlad (U.S. 5,907,675) teaches "Methods and Apparatus For Managing Deactivation and Shutdown of a Server."

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emmanuel Coffy whose telephone number is (703) 305-0325. The examiner can normally be reached on 8:30 - 5:00 P.M.

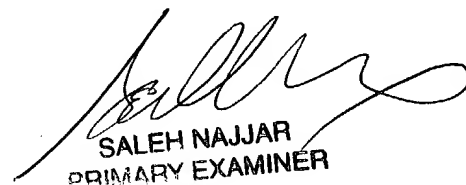
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (703) 308-7562. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Emmanuel Coffy
Patent Examiner
Art Unit 2157

EC
Sept 1, 2004



SALEH NAJJAR
PRIMARY EXAMINER